

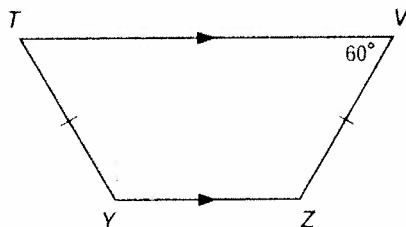
6-6 Practice

Trapezoids and Kites

Find each measure.

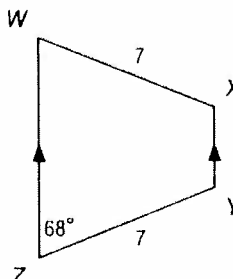
1. $m\angle T$

60°



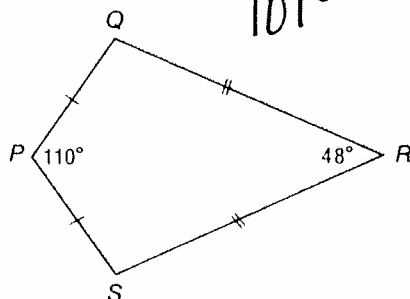
2. $m\angle Y$

112°



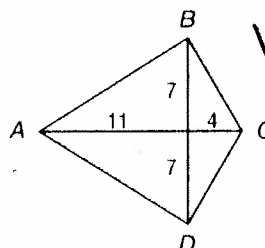
3. $m\angle Q$

101°



4. BC

$\sqrt{65}$



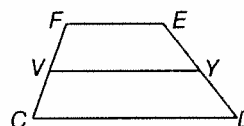
ALGEBRA For trapezoid $FEDC$, V and Y are midpoints of the legs.

5. If $FE = 18$ and $VY = 28$, find CD .

38

6. If $m\angle F = 140$ and $m\angle E = 125$, find $m\angle D$.

55



COORDINATE GEOMETRY $RSTU$ is a quadrilateral with vertices $R(-3, -3)$, $S(5, 1)$, $T(10, -2)$, $U(-4, -9)$.

7. Verify that $RSTU$ is a trapezoid. $\overline{RS} \parallel \overline{TU}$

8. Determine whether $RSTU$ is an isosceles trapezoid. Explain.

not isosceles; $RU = \sqrt{37}$ and $ST = \sqrt{34}$

9. **CONSTRUCTION** A set of stairs leading to the entrance of a building is designed in the shape of an isosceles trapezoid with the longer base at the bottom of the stairs and the shorter base at the top. If the bottom of the stairs is 21 feet wide and the top is 14 feet wide, find the width of the stairs halfway to the top.

17.5 ft

10. **DESK TOPS** A carpenter needs to replace several trapezoid-shaped desktops in a classroom. The carpenter knows the lengths of both bases of the desktop. What other measurements, if any, does the carpenter need?

The measure of the Base ≤ 5

Name _____

Directions: Answer the following questions pertaining to quadrilaterals.

1. The sum of the angles in a quadrilateral is _____.
a. 90 b. 180 ☒ c. 360 d. 720
2. A square CANNOT be classified as which of the following?
☒ a. trapezoid b. rectangle c. parallelogram d. rhombus
3. Which of the following is NOT true about the diagonals of a rectangle?
☒ a. They are always perpendicular. b. They are always congruent.
c. They bisect each other. d. Each forms 2 congruent triangles.
4. When is a rectangle also a parallelogram?
☒ a. Always b. Sometimes c. Never d. Only on Tuesdays
5. Which of the following is NOT true regarding the diagonals of a rhombus?
a. They bisect the angles. b. They are always perpendicular.
c. They bisect each other. ☒ d. They are always congruent.
6. The opposite angles in a parallelogram are _____.
a. acute b. obtuse ☒ c. congruent d. supplementary
7. Which of the following is NOT true for a rhombus?
a. The opposite sides are parallel. ☒ b. The diagonals are always congruent.
c. The opposite sides are always congruent. d. The consecutive sides are congruent.
8. Which of the following is NOT true about the consecutive sides of a square?
☒ a. They are parallel. b. They are congruent.
c. They are perpendicular d. They form an isosceles right triangle with the diagonal.
9. A trapezoid is also a _____.
a. square b. rhombus c. parallelogram ☒ d. quadrilateral
10. Which of the following is NOT true about the median of a trapezoid?
a. It is half the sum of the bases. ☒ b. It is parallel to the bases.
c. It connects the midpoints of the legs. ☒ d. It bisects the bases.
11. A quadrilateral with 2 pairs of consecutive sides congruent, but opposite sides not congruent is called a _____.
a. square b. rhombus ☒ c. kite d. isosceles trapezoid
- *12. The area of a square can be found by using the formula _____. (no ~~is~~ on test)
a. side cubed b. one-half base times height
☒ c. one-half diagonal 1 times diagonal 2 d. one-half length times width.